

NWS FORM E-5

(11-88)

(PRES. by NWS Instruction 10-924)

U.S. DEPARTMENT OF COMMERCE**NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION****NATIONAL WEATHER SERVICE****HYDROLOGIC SERVICE AREA (HSA)****WFO Jackson, Mississippi****MONTHLY REPORT OF HYDROLOGIC CONDITIONS**

REPORT FOR:

MONTH

YEAR

July**2015**

TO: Hydrometeorological Information Center, W/OH2
NOAA / National Weather Service
1325 East West Highway, Room 7230
Silver Spring, MD 20910-3283

SIGNATURE

Alan E. Gerard, Meteorologist In-Charge

DATE

8/31/2015

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924)



An X inside this box indicates that no river flooding occurred within this hydrologic service area.

Synopsis...

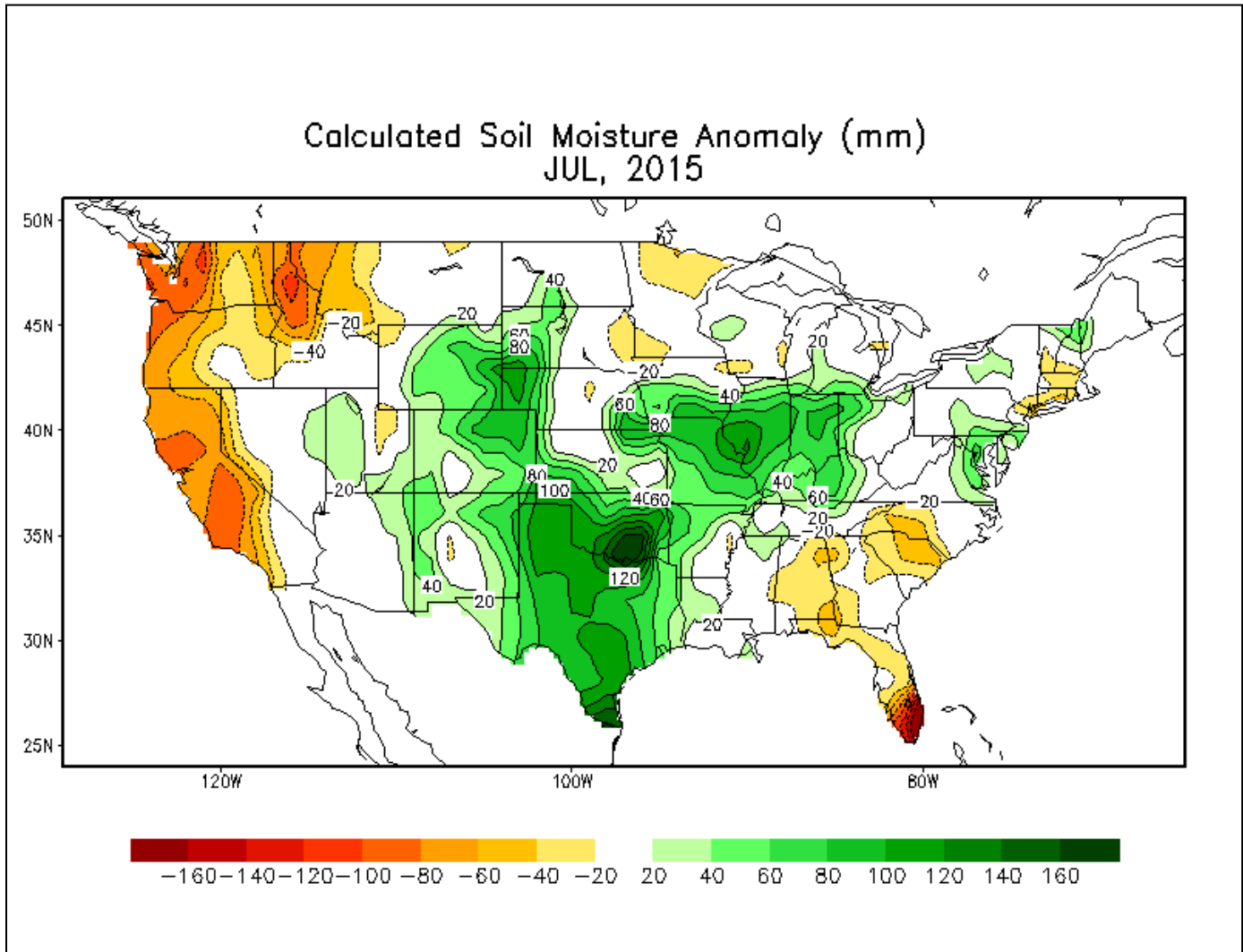
July 2015 was hot and, for the most part, was dry, even setting a couple records. In particular, this July was the hottest on record for Hattiesburg with an average temperature of 84.7 degrees. It was the third hottest July for Jackson and sixth hottest for Vicksburg. Hattiesburg even set a record of consecutive days above 95 degrees with a streak of 20 days. Jackson is still currently on its streak of 20 days above 95 degrees and nearing the record of 29 consecutive days. All other ASOS (Automated Surface Observing System) stations averaged nearly 2 degrees above average July temperatures. As for precipitation, this July was the eighth driest for Jackson with only 1.49 inches measured (that's over 3 inches below normal). The Greenwood, Vicksburg, and Meridian ASOS stations measured below normal as well. Hattiesburg and Greenville were the only two stations close to normal rainfall amounts.

Weather Highlights...

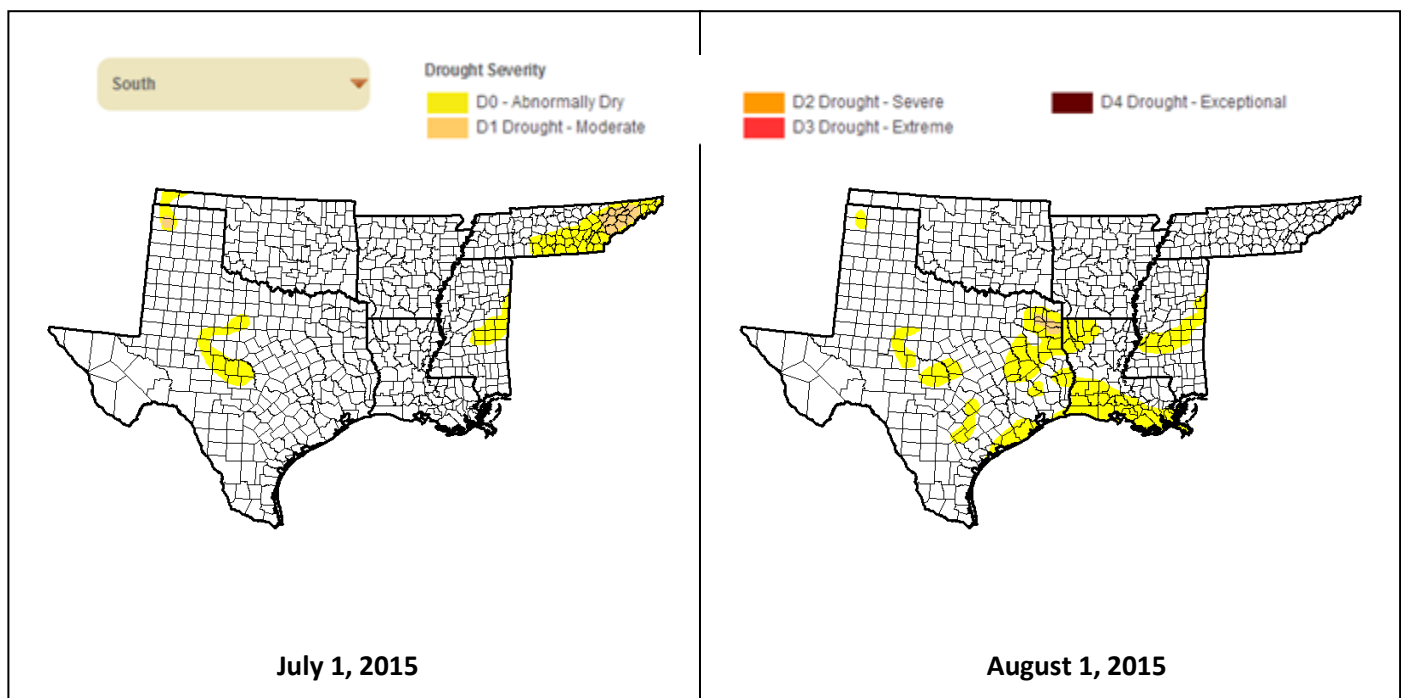
Widespread, but scattered, afternoon showers and storms started the month off on July 1st. Meridian got nearly half of its July rainfall on this day due to one particularly potent storm. On the 2nd, the Gulf sea breeze managed to spread northward as far as our most southern counties and parishes. This provided just a small amount of rainfall to those areas. The only major, organized rainfall this month occurred on the 4th, 5th and 6th as a cold front approached, stalled, and finally pushed through the HSA (Hydrologic Service Area). A few locations managed to receive 4 to 5 inches of total rainfall while most locations received only 1 to 2 inches total. High pressure then settled in and held firm over the South for the next two weeks. The occasional afternoon storm popped up but no significant rainfalls were seen during this time. On the 16th, a cold front did droop into the Golden Triangle area (the northeast part of the HSA) and bring some brief, moist relief up to a half inch in that area. It was short lived though as the high pressure maintained its stronghold over the South. On the 23rd, a slow-moving cold/stationary front approached and traversed the area on the 24th through the 26th. Rainfall associated with this system was very scattered but most locations in the HSA received rain at some point, though maybe only a quarter to half inch at the most. Another cold front passed through the HSA on the 28th. It brought some nice relief to the hot, humid, and dry conditions of recent weeks. Temperatures were only dropped a couple degrees but humidity was practically eliminated for a couple days post-frontal.

River and Soil Conditions

Soil Moisture Map:

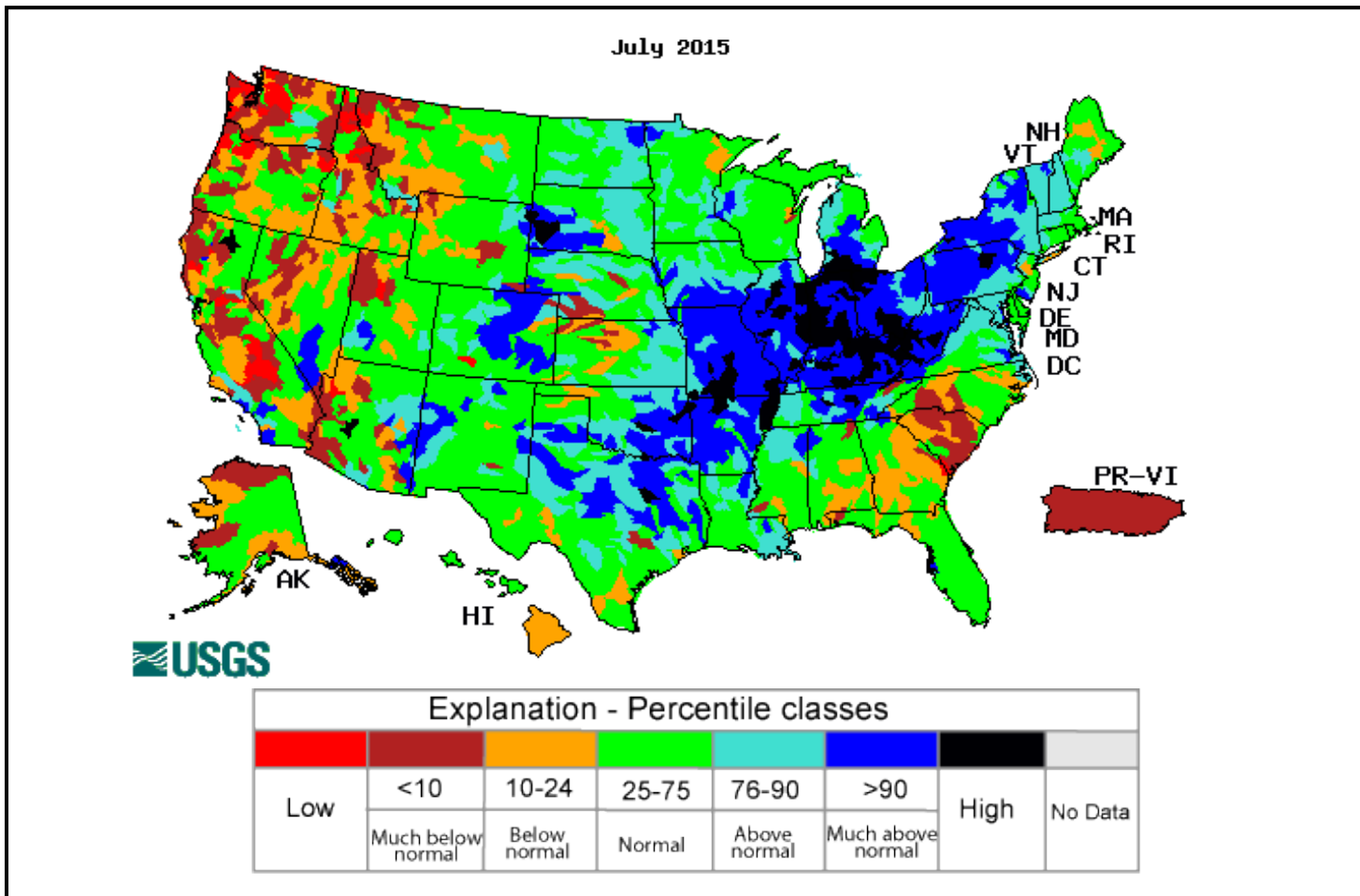


Drought Comparison:



Streamflow:

The United States Geological Survey's (USGS) July 2015 river streamflow records were compared with all historical July streamflow records. The average streamflow for this July was much above normal for the Boeuf River and Bayou Bartholomew basins in Northeast Louisiana and Southeast Arkansas. Below normal streamflow was seen on the Lower Pearl River and Noxubee River basins in Mississippi with much below normal streamflow on the Homochitto River basin. Above normal streamflow was also seen on the Tombigbee River basin in North Mississippi, while normal streamflow was experienced throughout the rest of the HSA.



River Conditions:

The only river flooding that occurred in July was from the Mississippi River. For the conditions of the Mississippi River from Arkansas City to Natchez during July, refer to the hydrographs on the next page.

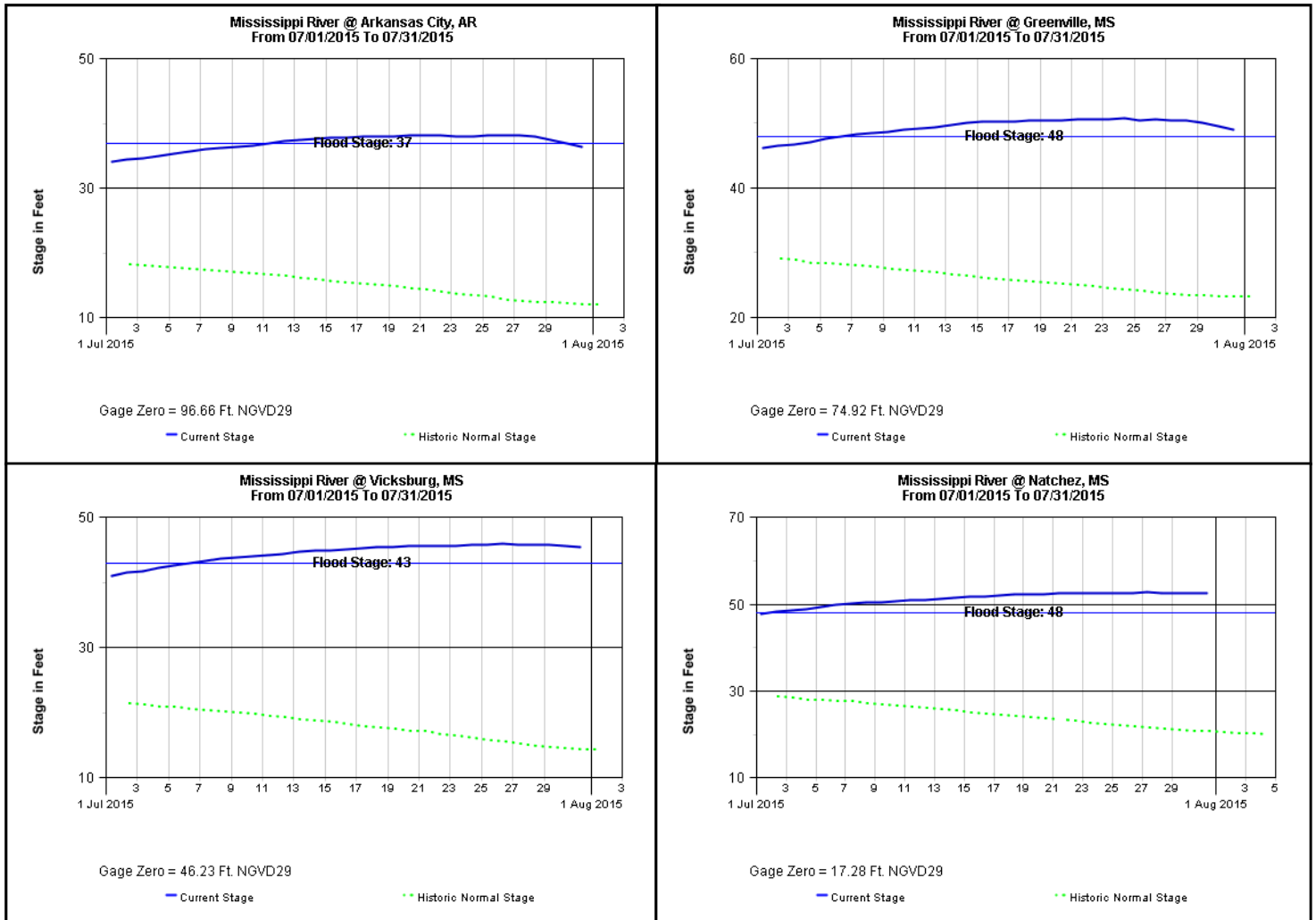
Climatic Outlook and Flood Potential:

The climatic outlook shows equal chances for above, below, and normal temperatures over the next three months for the entire HSA. In regards to precipitation, the outlook shows equal chances for above, below, and normal precipitation amounts for the entire HSA as well. Thus, based on current soil moisture, streamflow, and the 3-month weather outlook, the flood potentials are as follows:

Pearl River System: Below Normal.
Yazoo River System: Normal.
Big Black River System: Normal.
Homochitto River System: Below Normal.
Pascagoula River System: Normal.
Northeast LA and Southeast AR: Normal.
Tombigbee River System: Normal.
Mississippi River: Normal.

Mississippi River Plots July 2015

Plots Courtesy of the United States Army Corps of Engineers



Monthly Preliminary High and Low Stages:

Location	Flood Stage (ft)	High Stage (ft)	Date	Low Stage (ft)	Date
Arkansas City	37	38.22	7/26	34.11	7/01
Greenville	48	50.71	7/24	46.17	7/01
Vicksburg	43	45.96	7/26	41.05	7/01
Natchez	48	52.70	7/27	47.85	7/01

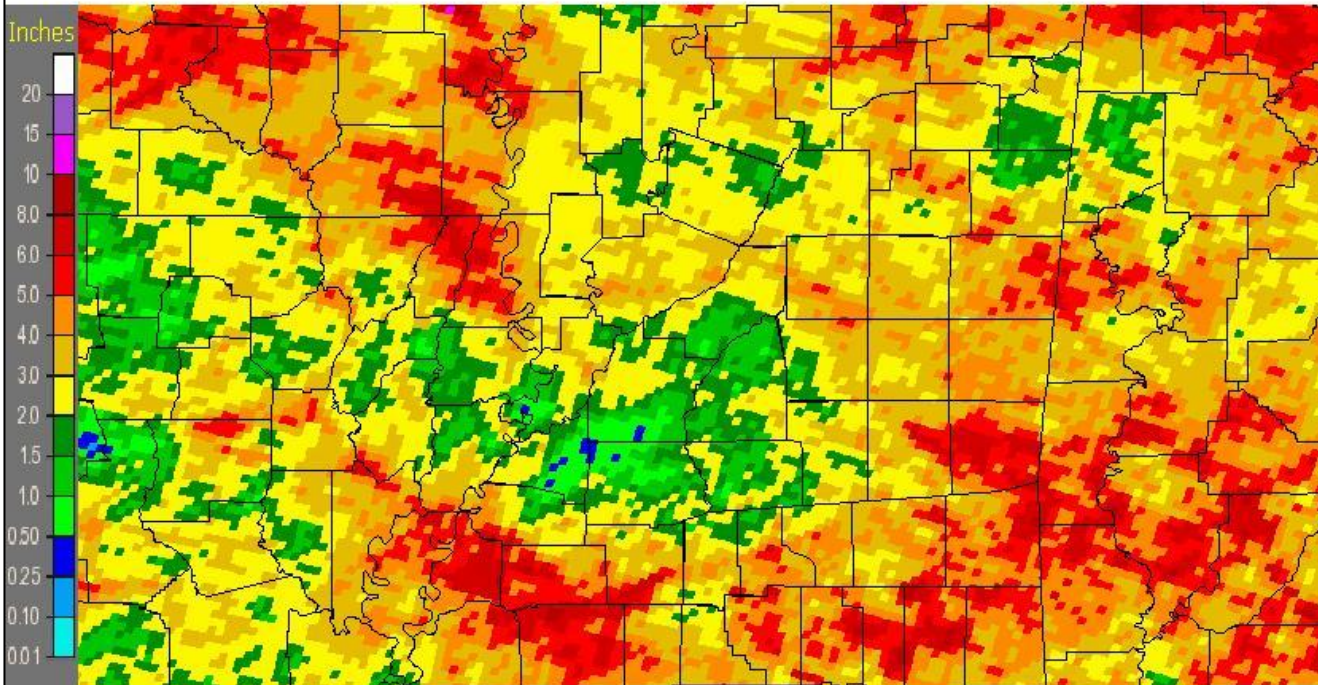
Rainfall for the Month of July

The largest rainfall amounts in the HSA from NWS Cooperative Observer reports during the period from 7 am on June 30th until 7 am on Jul 31st were: 7.39 inches at Dermott, AR; 6.91 inches at Walnut Grove, MS; 6.68 inches at Lake Providence, LA; 6.49 inches at Columbia, MS; and 5.99 inches at Hattiesburg, MS

Some lower rainfall amounts: 1.59 inches at Goshen Springs, MS; 2.02 inches at Port Gibson, MS; 2.21 inches at Macon, MS; 2.39 inches at Union Church, MS; and 2.41 inches at Hazlehurst, MS.

July Rainfall Estimates:

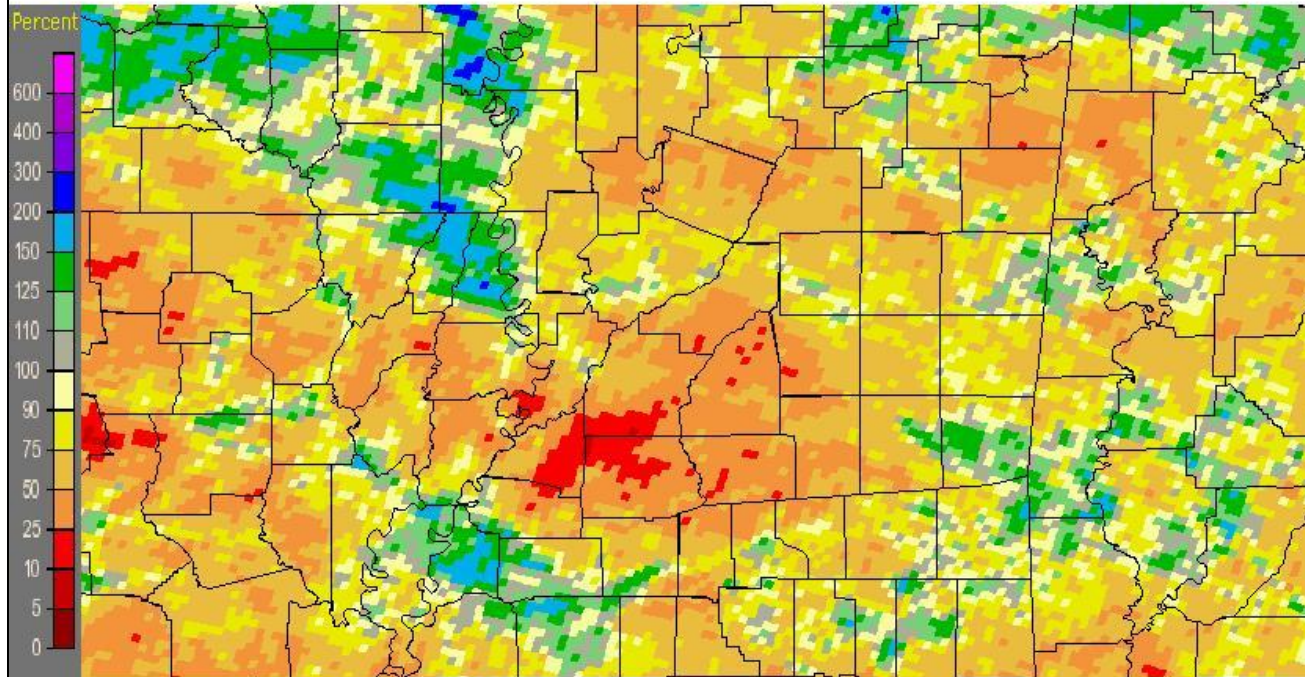
Jackson, MS (JAN): July, 2015 Monthly Observed Precipitation
Valid at 8/1/2015 1200 UTC- Created 8/3/15 13:38 UTC



Note: Observer rainfall and MPE July differ due to time differences.

July Percent of Normal Precipitation:

Jackson, MS (JAN): July, 2015 Monthly Percent of Normal Precipitation
Valid at 8/1/2015 1200 UTC- Created 8/3/15 13:40 UTC



Note: Observer rainfall and MPE July differ due to time differences.

July Rainfall for Selected Cities:

City (Airport)	Rainfall	Departure from Normal	2015 Rainfall	2015 Departure from Normal
Jackson (KJAN)	1.49	-3.32	36.21	+3.17
Meridian (KMEI)	3.57	-1.57	31.60	-3.37
Greenville (KGLH)	4.08	+0.28	25.57	-6.53
Greenwood (KGWO)	2.29	-2.02	30.22	+2.58
Hattiesburg (KHBG)	6.20	+0.81	34.75	-2.68
Vicksburg (KTVR)	2.08	-1.52	32.30	+1.06

Total Flood Warning products issued: 4

Total Flood Statement products issued: 54

Total Flood Advisories MS River: 0

Daily Climate and Ag WX Products (AGO'S) issued: 31

Daily CoCoRaHS Rainfall Products (LCO'S) issued: 31

Daily River and Lake Summary Products (RVD'S) issued: 31

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&
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Note: Provisional stage and precipitation data were furnished with the cooperation of the Mississippi, Louisiana, and Arkansas National Weather Service Cooperative Observer Programs, United States Geological Survey (USGS), United States Army Corps of Engineers (USACE), Pearl River Valley Water Supply District (PRVWSD), Pat Harrison Waterway District, Pearl River Basin Development District, and the Mississippi Department of Environmental Quality.

cc: USGS Little Rock District
USGS Ruston District
USACE Mobile District
USACE Vicksburg District
USACE Mississippi Valley Division
USGS Mississippi District
SRH Climate, Weather and Water Division
Lower Mississippi River Forecast Center
Pearl River Valley Water Supply District
Hydrologic Information Center
Southern Region Climate Center
Pat Harrison Waterway District
Pearl River Basin Development District